

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

Petition of the Wisconsin Department of Transportation for the Relocation of the Public Crossing of CTH 'K' in the Town of Stockton and the Closure of the Public Crossing of Five Corners Road with the Wisconsin Central Ltd. Tracks in the Town of Amherst, Portage County

9164-RX-607

FINAL DECISION

By letter dated June 15, 2005, the Wisconsin Department of Transportation (DOT) filed a petition with the Office of the Commissioner of Railroads (OCR) under §§195.28 and 195.29, Stats., for the relocation of the public crossing of CTH 'K' in the Town of Stockton and the closure of the public crossing of Five Corners Road with the Wisconsin Central Ltd. (WCL) tracks in the Town of Amherst, Portage County (crossing nos. 692 520T and 692 517K).

The notice of hearing incorrectly located the CTH 'K' crossing in the Town of Amherst. The existing crossing is on the town line dividing the Town of Stockton and the Town of Amherst. The relocated crossing will be completely in the Town of Stockton.

Pursuant to due notice, public hearing was held in this matter on September 21, 2005 in Plover, Wisconsin with hearing examiner Douglas S. Wood presiding.

On December 8, 2005, the hearing examiner issued a proposed decision. On December 20, the OCR received comments in opposition to closing the access to USH 10 for 5 Corners Road. The OCR does not have jurisdiction to determine the access points on USH 10. The OCR decision relates to the at-grade crossing. Given that a determination had already been made to eliminate the highway intersection the OCR determined there was no point in retaining the rail-highway crossing. However, the Commissioner does find that the remaining access at the relocated CTH 'K' crossing will improve public safety and is consistent with public convenience.

The Commissioner adopts the proposed decision as final without change.

Appearances:

**Parties**

Wisconsin Department of Transportation, Petitioner  
by  
Mark Morrison, PE  
Grade Crossing Safety Engineer  
PO Box 7914  
Madison, Wisconsin 53707-7914

As Interest May Appear:

Wisconsin Central Ltd.  
by  
Terry Lee, PE  
Manager Engineering Services  
1625 Depot Street  
Stevens Point, Wisconsin 54481

Portage County Highway Department  
by  
Dale Petersen, Patrol Superintendent  
800 Plover Avenue  
Plover, WI 54467

Town of Amherst  
by  
Roger Bacon Town Supervisor  
Richard Trzebiatowski, Town Supervisor  
5396 CTH 'T'  
Amherst, WI 54406

Town of Stockton  
by  
Ron Borski, Town Chairman  
8366 CTH 'B'  
Amherst, WI 54406

#### Findings of Fact

#### THE COMMISSIONER FINDS:

The Wisconsin Department of Transportation proposes to relocate the public crossing of CTH 'K' and to close the public crossing of Five Corners Road with the Wisconsin Central Ltd. tracks. The DOT plans to reconstruct a portion of USH 10 in 2006-2007. As part of that project DOT proposes to realign and relocate CTH 'K' and to close Five Corners Road. Closing a crossing means that the roadway would be terminated at the tracks and would be permanently closed to public travel.

The railroad currently operates about 18 to 20 through train movements per day over the crossing locations at a speed of 60 mph.

**CTH 'K'****Crossing no. 692 520T**

CTH 'K' is 22' wide with 3'-wide crushed aggregate shoulders and intersects the WCL tracks at an angle of 55° (left-hand forward). The crossing consists of one mainline track.

CTH 'K' intersects USH 10 119' north of the crossing. CTH 'K' is controlled by stop signs at that intersection.

DOT proposes to close the existing crossing and relocate the roadway about 210' to the west (measured along the tracks). The proposed typical section would be 24' wide with 6'-wide shoulders (3' paved) and would intersect the tracks at an angle of 75° (left-hand forward). The intersection with USH 10 will be about 106' north of the crossing.

The County preferred that medians not be installed on the approaches to the crossing. The railroad testified that medians are desirable because they improve safety. The OCR agrees and orders that medians or some type of channelization devices be installed for at least 60' in advance of the crossing on each approach. Channelization devices improve safety by deterring drivers from driving around operating crossing gates. With the channelization devices a driver must drive on the wrong side of the roadway to go around the gates, which deters all but the most aggressive or incompetent drivers.

CTH 'K' carries 320 ADT (average daily traffic). The DOT projects CTH 'K' will carry 500 ADT in the design year of 2025. The speed limit is 55 mph. Actual speeds are much lower due to the proximity of the USH 10 intersection.

A driver traveling at 55 mph needs a distance of 527' to stop safely. The crossing is visible from more than 527'. Assuming a train speed of 60 mph, a driver traveling at 55 mph needs to see a train when it is 655' from the crossing from a point 527' down the highway. The sight distance available in each quadrant from the safe stopping distance is over 800' in the northwest, northeast, and southwest quadrants. The corner sight distance is 100' in the southeast quadrant.

The exposure factor at this crossing is about 6400. The exposure factor at this crossing will exceed 10,000 in the design year assuming 20 train movements per day. The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

Seven train-vehicle accidents have occurred at this crossing since 1973. The accidents occurred in 1982, 1985, 1987, 1991, and 1996 (3).

Accidents that do occur here will likely be quite serious if a through train is involved due to their 60 mph speed. Train speed is strongly correlated with fatalities in train/vehicle accidents. More specifically, crossings with train speeds of 40 mph and over have a disproportionate number of fatalities. According to Federal Railroad Administration (FRA) statistics, nationally, in 1994 71% of fatalities occurred at crossings with train speeds of 40 mph+, even though only 26% of all crossings had train speeds of 40 mph+.

The crossing presently has 12" automatic flashing lights with gates for warning devices. These warning devices are adequate. However, in order to adequately protect public safety, new 12" LED automatic flashing lights with gates and constant warning time circuitry are needed in order to provide coverage with automatic flashing lights and gates at the existing crossing and the relocated crossing without any gaps. The existing signals were installed in 1997 and can be re-used at another location. The Commissioner intends to order that these signals be reused at the crossing of the Wisconsin Central Ltd. tracks with **Applebee Road** in the Town of Weirgor, Sawyer County. A separate order will be issued for that installation.

*Constant warning time circuitry* adjusts for train speed and causes the crossing signals to always operate for the same amount of time before the train reaches the crossing, regardless of train speed. A motion detector simply detects the train operation, but does not adjust for train speed so that the amount of warning time varies based on train speed.

*Light emitting diodes (LED)* lamps replace incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

## **Five Corners Road**

## **Crossing no. 692 517K**

Five Corners Road is 18' wide with 2'-wide crushed aggregate shoulders and intersects the tracks at an angle of 55° (left-hand forward). The crossing consists of one mainline track.

Five Corners Road carries about 100 ADT (average daily traffic). The speed limit is 55 mph. Actual speeds are lower due to the proximity of the USH 10 intersection, which is 132' north of the crossing.

DOT determined with the Town of Amherst to remove the existing roadway intersection of USH 10 and Five Corners Road. Consequently, DOT proposes to remove the crossing and obliterate the roadway from USH 10 south to Old Highway 18. There are no residences on that section of Five Corners Road.

A driver traveling at 55 mph needs a distance of 527' to stop safely. The crossing is visible from more than 527'. Assuming a train speed of 60 mph, a driver traveling at 55 mph needs to see a train when it is 655' from the crossing from a point 527' down the highway. The sight distance available in each quadrant from the safe stopping distance is over 800' in the northwest, northeast, and southwest quadrants. The corner sight distance is 35' in the southeast quadrant.

The exposure factor at this crossing is about 2000.

Two train-vehicle accidents have occurred at this crossing since 1973. The accidents occurred in 1985 and 1996.

Accidents that do occur here will likely be quite serious if a through train is involved due to their 60 mph speed.

In summary, the relocation of the crossing at-grade of the WCL tracks with CTH 'K' and the closure of the crossing at-grade of the tracks with Five Corners Road will promote public safety and convenience by providing an improved crossing angle and by consolidating two crossings into one crossing. The likelihood of train-vehicle accidents is reduced by reducing the number of conflict points.

**Source of funding:** The highway project shall fund all costs associated with changes to these two crossings.

#### Ultimate Conclusions on the Issues

##### THE COMMISSIONER CONCLUDES:

1. That the relocation of the crossing at-grade of CTH 'K' with the Wisconsin Central Ltd. tracks in accordance with the design plans of the Wisconsin Department of Transportation in the Town of Stockton, Portage County will promote public safety and convenience.
2. That the closure of the crossing at-grade of Five Corners Road with the Wisconsin Central Ltd. tracks in accordance with the design plans of the Wisconsin Department of Transportation in the Town of Amherst, Portage County will promote public safety and convenience.
3. That in order to adequately protect and promote public safety, it is necessary to install and maintain 12" LED automatic flashing lights with gates at the relocated CTH 'K' crossing.
4. That it is reasonable that the Wisconsin Central Ltd. bear no part of the cost for the crossing construction.

#### Conclusion of Law

##### THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §§195.28 and 195.29, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

## Order

### THE COMMISSIONER ORDERS:

1. That the **Wisconsin Central Ltd.** shall install and maintain a crossing at-grade of **CTH 'K'** with its tracks in accordance with the design plans of the Wisconsin Department of Transportation in the Town of Stockton, Portage County by **May 18, 2007** (Crossing No. 692 520T).
2. That the **Wisconsin Department of Transportation and Portage County** shall install and **Portage County** shall maintain medians or some type of channelization devices extending at least 60' in advance of the **CTH 'K'** crossing on each approach in the Town of Stockton, Portage County by **May 18, 2007**.
3. That the **Wisconsin Central Ltd.** shall install and maintain 12" LED automatic flashing lights with gates, constant warning time circuitry, and other appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with **CTH 'K'** at-grade in the Town of Stockton, Portage County by **June 1, 2007** (Crossing No. 692 520T).
4. That the **Wisconsin Central Ltd.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.
5. That the signal installation work herein ordered shall not begin until the regional office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.
6. That the **Wisconsin Department of Transportation and Portage County** shall not open **CTH 'K'** at the railroad crossing to unrestricted public use until the installation and activation of the automatic warning devices ordered above.
7. That the **Wisconsin Department of Transportation and the Town of Amherst** shall obliterate Five Corners Road between the crossing and Old Highway 18 in the Town of Amherst, Portage County by **May 18, 2007**.
8. That the **Wisconsin Central Ltd.** shall remove the crossing at Five Corners Road in the Town of Amherst, Portage County by **May 18, 2007**, provided also that the **Wisconsin Central Ltd.** shall coordinate the crossing removal with the Wisconsin Department of Transportation and the Town of Amherst.
9. That the **Wisconsin Central Ltd.** shall bear no part of the cost of the crossing construction, except for any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.

10. That jurisdiction is retained.

Dated at Madison, Wisconsin, (January 12, 2006).

By the Office of the Commissioner of Railroads.

---

Rodney W. Kreunen  
Commissioner of Railroads

9164F607